

Calculus Warm Up #12-5

No Warm Up.

Turn in your Pink and Tan WS's stapled to your warm up.

Today's agenda:

Take test part 2 - Calculator allowed

****You must show your cleared calculator when you turn in your test.**

Continue work on the final exam review.

Answers to Review #1&2 follow this slide

Final Review #1 answers:

1. $\frac{1}{12}$

2. $x=2$ removable
 $x=-2$ non-remov.

3. $\frac{6x^2 + 2}{(1 - 3x^2)^2}$

4. $\frac{7x^3 + 3x^2}{\sqrt{2x+1}}$

5. $-\frac{2}{(2-x)^3}$

6. 42 ft/sec^2

7. $-\frac{y}{x+2y}$

8. $y-2 = \frac{1}{4}(x-3)$

9. $x = \frac{1}{3}, 1$

10. $\frac{1}{\pi} \text{ in/sec}$

11. $x = -\frac{1}{3}, -\frac{1}{2}$

12. Max @ $x=0$
Min @ $x=\frac{2}{3}$

18. $(2x^2+5)^2$

13. $y = -1$

19. $\frac{4}{3}$

14. $x^3 - x^2 + 5x + C$

20. $\frac{1}{3}$

15. $x + \frac{x^2}{2} + C$

16. $f(x) = x^2 - x + 3$

17. $\frac{32}{3}$

Final Rev. #2

1. ≈ 0.4887

6. $4(e^x + e^{3x})^3 (e^x + 3e^{3x})$

2. ≈ 5.864

7. $x + \frac{1}{2} \ln(x^2 + 1) + C$

3. ≈ 160.85

8. $\frac{9}{2}$

4. $\frac{1 - ye^x}{e^x - 2y}$

9. $f^{-1}(x) = \sqrt[3]{x-5}$

10. $\frac{2}{e^2}$

5. $y'' = \frac{18}{(x-6)^3}$

11. $(\frac{\pi}{4}, \sqrt{2})$ \nmid $(\frac{5\pi}{4}, -\sqrt{2})$
Max Min

$$12. \frac{2\sqrt{2}}{\pi}$$

$$13. \frac{1}{2} \sin \theta + C$$

$$14. x^2 \sin x + 2x \cos x - 2 \sin x + C$$

$$15. \ln(9+x^2) - \arctan\left(\frac{x}{3}\right) + C$$

